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PATENT APPLICATION US/08/727,084Rch CENTER 1600/2900 DATE: 10/30/98

14

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This Raw Listing contains the General Information Section and up to the first 5 pages.

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1 SEQUENCE LISTING 2 General Information: 3 (1)4 (i) APPLICANT: Pulst, Stefan M 5 6 7 (ii) TITLE OF INVENTION: NUCLEIC ACID ENCODING SPINOCEREBELLAR ATAXIA-2 AND PRODUCTS RELATED THERETO 8 9 10 (iii) NUMBER OF SEQUENCES: 19 11 (iv) CORRESPONDENCE ADDRESS: 12 13 (A) ADDRESSEE: Mueting, Raasch & Gebhardt, P.A. (B) STREET: 119 North Fourth Street 14 15 (C) CITY: Minneapolis 16 (D) STATE: Minnesota 17 (E) COUNTRY: USA (F) ZIP: 55401 18 19 (V) COMPUTER READABLE FORM: 20 21 (A) MEDIUM TYPE: Floppy disk 22 (B) COMPUTER: IBM PC compatible 23 (C) OPERATING SYSTEM: PC-DOS/MS-DOS (D) SOFTWARE: PatentIn Release #1.0, Version #1.30 24 25 26 (vi) CURRENT APPLICATION DATA: (A) APPLICATION NUMBER: US 08/727,084 27 (B) FILING DATE: 08-OCT-1996 28 29 (C) CLASSIFICATION: 30 31 (viii) ATTORNEY/AGENT INFORMATION: 32 (A) NAME: Mueting, Ann M. 33 (B) REGISTRATION NUMBER: 33,977 34 (C) REFERENCE/DOCKET NUMBER: 232.00010101 35 (ix) TELECOMMUNICATION INFORMATION: 36 37 (A) TELEPHONE: 612/305-1220 38 (B) TELEFAX: 612/305-1228 39 40 41 (2) INFORMATION FOR SEQ ID NO:1: 42 43 (i) SEQUENCE CHARACTERISTICS: 44

(A) LENGTH: 516 base pairs

(B) TYPE: nucleic acid

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RAW SEQUENCE LISTING PATENT APPLICATION US/08/727,084B TECH CENTER 1600/2997 ME: 09:44:56

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47	(C) STRANDEDNESS: both													
48	(D) TOPOLOGY: both													
49														
50	(ii) MOLECULE TYPE: DNA (genomic)													
51	(==,==, ===, ===, (g=====,													
52														
53														
54	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:													
	(XI) SEQUENCE DESCRIPTION: SEQ ID NO:1:													
55		amaammaama (A												
56	TTGGTAGCAA CGGAAACGGC GGCGGCGCGT TTCGGCCCGG CTCCCGGCGG	CTCCTTGGTC 60												
57														
58	TCGGCGGGCC TCCCCGCCCC TTCGTCGTCG TCCTTCTCCC CCTCGCCAGC	CCGGGCGCCC 120												
59														
60	CTCCGGCCGC GCCAACCCGC GCCTCCCCGC TCGGCGCCCG TGCGTCCCCG	CCGCGTTCCG 180												
61														
62	GCGTCTCCTT GGCGCGCCG GCTCCCGGCT GTCCCCGCCC GGCGTGCGAG	CCGGTGTATG 240												
63														
64	GGCCCCTCAC CATGTCGCTG AAGCCCCAGC AGCAGCAGCA GCAGCAGCAG	CAACAGCAGC 300												
65														
66	AGCAGCAACA GCAGCAGCAG CAGCAGCAGC AGCCGCCGCC CGCGGCTGCC	AATGTCCGCA 360												
67		·												
68	AGCCCGGCGG CAGCGGCCTT CTAGCGTCGC CCGCCGCCGC GCCTTCGCCG	TCCTCGTCCT 420												
69														
70	CGGTCTCCTC GTCCTCGGCC ACGGCTCCCT CCTCGGTGGT CGCGGCGACC	TCCGGCGGCG 480												
71														
72	GGAGGCCCGG CCTGGGCAGG TGGGTGTCGG CACCCC	516												
73	dendecedd cerddockdd raddraredd cheese	310												
73 74	(2) INFORMATION FOR SEQ ID NO:2:													
75	(2) INFORMATION FOR SEQ ID NO.2:													
76	(i) GEOLUNGE GUADAGERICATOS.													
	(i) SEQUENCE CHARACTERISTICS:													
77	(A) LENGTH: 4481 base pairs													
78	(B) TYPE: nucleic acid													
79	(C) STRANDEDNESS: both													
80	(D) TOPOLOGY: both													
81														
82	(ii) MOLECULE TYPE: cDNA													
83														
84														
85	(ix) FEATURE:													
86	(A) NAME/KEY: CDS													
87	(B) LOCATION: 1634101													
88														
89														
90	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:													
91														
92	ACCCCGAGA AAGCAACCCA GCGCGCCGCC CGCTCCTCAC GTGTCCCTCC	CGGCCCGGG 60												
93														
94	GCCACCTCAC GTTCTGCTTC CGTCTGACCC CTCCGACTTC CGGTAAAGAG	TCCCTATCCG 120												
95														
96	CACCTCCGCT CCCACCCGGC GCCTCGGCGC GCCCGCCCTC CG ATG CGC	TCA GCG 174												
97	Met Arg													
98	1													
	· · · · · · · · · · · · · · · · · · ·													

RAW SEQUENCE LISTING PATENT APPLICATION US/08/727,084B

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														71	TINE ION	enm	520524
				~~~													S29524.raw
100			GCT														222
101		Ala	Ala	Pro	Arg		Pro	Ala	Val	Ala		Glu	Ser	Arg	Arg		
102	5					10					15					20	
103					_			_									
104			GCC														270
105	Ala	Ala	Ala	Arg	Trp	Pro	Gly	Trp	Arg	Ser	Leu	Gln	Arg	Pro	Ala	Arg	
106					25					30					35		
107																	
108			GGG														318
109	Arg	Ser	Gly	Arg	Gly	Gly	Gly	Gly	Ala	Ala	Pro	Gly	Pro	Tyr	Pro	Ser	
110				40					45					50			
111																	
112			CCT														366
113	Ala	Ala	Pro	Pro	Pro	Pro	Gly		Gly	Pro	Pro	Pro	Ser	Arg	Gln	Ser	
114			55					60					65				
115																	
116			CCC														414
117	Ser	Pro	Pro	Ser	Ala	Ser	Asp	Cys	Phe	Gly	Ser	Asn	Gly	Asn	Gly	Gly	
118		70					75					80					
119																	
120	GGC	GCG	TTT	CGG	CCC	GGC	TCC	CGG	CGG	CTC	CTT	GGT	CTC	GGC	GGG	CCT	462
121	Gly	Ala	Phe	Arg	Pro	Gly	Ser	Arg	Arg	Leu	Leu	Gly	Leu	Gly	Gly	Pro	
122	85					90					95					100	
123																	
124	CCC	CGC	CCC	TTC	GTC	GTC	GTC	CTT	CTC	CCC	CTC	GCC	AGC	CCG	GGC	GCC	510
125	Pro	Arg	Pro	Phe	Val	Val	Val	Leu	Leu	Pro	Leu	Ala	Ser	Pro	Gly	Ala	
126					105					110					115		
127																	
128	CCT	CCG	GCC	GCG	CCA	ACC	CGC	GCC	TCC	CCG	CTC	GGC	GCC	CGT	GCG	TCC	558
129	Pro	Pro	Ala	Ala	Pro	Thr	Arg	Ala	Ser	Pro	Leu	Gly	Ala	Arg	Ala	Ser	
130				120					125					130			
131																	
132			CGT														606
133	Pro	Pro	Arg	Ser	Gly	Val	Ser	Leu	Ala	Arg	Pro	Ala	Pro	Gly	Cys	Pro	
134			135					140					145				
135																	
136			GCG														654
137	Arg		Ala	Cys	Glu	Pro	Val	Tyr	Gly	Pro	Leu	Thr	Met	Ser	Leu	Lys	
138		150					155					160					
139																	
140			CAG														702
141		Gln	Gln	Gln	Gln		Gln	Gln	Gln	Gln		Gln	Gln	Gln	Gln		
142	165					170					175					180	
143																	
144			CAG														750
145	Gln	Gln	Gln	Gln		Gln	Gln	Pro	Pro		Ala	Ala	Ala	Asn		Arg	
146					185					190					195		
147																	
148			GGC														798
149	Lys	Pro	Gly	_	Ser	Gly	Leu	Leu		Ser	Pro	Ala	A1a		Pro	Ser	
150				200					205					210			
151																	
152	CCG	TCC	TCG	TCC	TCG	GTC	TCC	TCG	TCC	TCG	GCC	ACG	GCT	CCC	TCC	TCG	846

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														IN	<i>IPUT</i>	SET:	S29524.raw
153	Pro	Ser	Ser	Ser	Ser	Val	Ser	Ser	Ser	Ser	Ala	Thr	Ala	Pro	Ser	Ser	
154			215					220					225				
155																	
156	GTG	GTC	GCG	GCG	ACC	TCC	GGC	GGC	GGG	AGG	CCC	GGC	CTG	GGC	AGA	GGT	894
157	Val	Val	Ala	Ala	Thr	Ser	Gly	Gly	Gly	Arg	Pro	Gly	Leu	Gly	Arg	Gly	
158		230					235			_		240					
159																	
160	CGA	AAC	AGT	AAC	AAA	GGA	CTG	CCT	CAG	TCT	ACG	ATT	TCT	TTT	GAT	GGA	942
161	Arg	Asn	Ser	Asn	Lys	Gly	Leu	Pro	Gln	Ser	Thr	Ile	Ser	Phe	Asp	Gly	
162	245				•	250					255				_	260	
163																	
164	ATC	TAT	GCA	AAT	ATG	AGG	ATG	GTT	CAT	ATA	CTT	ACA	TCA	GTT	GTT	GGC	990
165									His								
166		-			265	_				270					275	•	
167																	
168	TCC	AAA	TGT	GAA	GTA	CAA	GTG	AAA	AAT	GGA	GGT	ATA	TAT	GAA	GGA	GTT	1038
169									Asn								
170		-	-	280				•	285	-	-		•	290	-		
171																	
172	TTT	AAA	ACT	TAC	AGT	CCG	AAG	TGT	GAT	TTG	GTA	CTT	GAT	GCC	GCA	CAT	1086
173									Asp								
174		•	295	-			-	300	-				305				
175													-				
176	GAG	AAA	AGT	ACA	GAA	TCC	AGT	TCG	GGG	CCG	AAA	CGT	GAA	GAA	ATA	ATG	1134
177	Glu	Lys	Ser	Thr	Glu	Ser	Ser	Ser	Gly	Pro	Lys	Arq	Glu	Glu	Ile	Met	
178		310					315		-		-	320					
179																	
180	GAG	AGT	ATT	TTG	TTC	AAA	TGT	TCA	GAC	TTT	GTT	GTG	GTA	CAG	TTT	AAA	1182
181									Asp								
182	325					330	4		•		335					340	
183																	
184	GAT	ATG	GAC	TCC	AGT	TAT	GCA	AAA	AGA	GAT	GCT	TTT	ACT	GAC	TCT	GCT	1230
185	Asp	Met	Asp	Ser	Ser	Tyr	Ala	Lvs	Arg	Asp	Ala	Phe	Thr	Asp	Ser	Ala	
186	_		-		345	_		•	•	350				•	35 <b>5</b>		
187																	
188	ATC	AGT	GCT	AAA	GTG	AAT	GGC	GAA	CAC	AAA	GAG	AAG	GAC	CTG	GAG	CCC	1278
189	Ile	Ser	Ala	Lys	Val	Asn	Gly	Glu	His	Lys	Glu	Lys	Asp	Leu	Glu	Pro	
190				360			•		365	•		-	-	370			
191																	
192	TGG	GAT	GCA	GGT	GAA	CTC	ACA	GCC	AAT	GAG	GAA	CTT	GAG	GCT	TTG	GAA	1326
193									Asn								
194	_	_	375	-				380					385				
195																	
196	AAT	GAC	GTA	TCT	AAT	GGA	TGG	GAT	CCC	AAT	GAT	ATG	TTT	CGA	TAT	AAT	1374
197									Pro								
198		390				-	395	•			•	400		_	•		
199																	
200	GAA	GAA	AAT	TAT	GGT	GTA	GTG	TCT	ACG	TAT	GAT	AGC	AGT	TTA	TCT	TCG	1422
201									Thr								
202	405			-	-	410				-	415					420	
203																	
204	TAT	ACA	GTG	CCC	TTA	GAA	AGA	GAT	AAC	TCA	GAA	GAA	TTT	TTA	AAA	CGG	1470
205									Asn								
	-							•							-		

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206					425					430					435		
207																	
208	GAA	GCA	AGG	GCA	AAC	CAG	TTA	GCA	GAA	GAA	ATT	GAG	TCA	AGT	GCC	CAG	1518
209	Glu	Ala	Arq	Ala	Asn	Gln	Leu	Ala	Glu	Glu	Ile	Glu	Ser	Ser	Ala	Gln	
210			•	440					445					450			
211																	
212	TAC	AAA	GCT	CGA	GTG	GCC	CTG	GAA	AAT	GAT	GAT	AGG	AGT	GAG	GAA	GAA	1566
213	Tyr	Lys	Ala	Arq	Val	Ala	Leu	Glu	Asn	Asp	Asp	Arq	Ser	Glu	Glu	Glu	
214		-	455					460			_		465				
215																	
216	AAA	TAC	ACA	GCA	GTT	CAG	AGA	AAT	TCC	AGT	GAA	CGT	GAG	GGG	CAC	AGC	1614
217	Lys	Tyr	Thr	Ala	Val	Gln	Arg	Asn	Ser	Ser	Glu	Arq	Glu	Gly	His	Ser	
218	-	470					475					480		•			
219																	
220	ATA	AAC	ACT	AGG	GAA	AAT	AAA	TAT	ATT	CCT	CCT	GGA	CAA	AGA	AAT	AGA	1662
221	Ile	Asn	Thr	Arg	Glu	Asn	Lvs	Tvr	Ile	Pro	Pro	Glv	Gln	Arq	Asn	Arg	
222	485					490	•	-			495	-		•		500	
223																	
224	GAA	GTC	ATA	TCC	TGG	GGA	AGT	GGG	AGA	CAG	AAT	TCA	CCG	CGT	ATG	GGC	1710
225	Glu	Val	Ile	Ser	Trp	Gly	Ser	Gly	Arq	Gln	Asn	Ser	Pro	Arq	Met	Gly	
226					505	_		•		510					515	-	
227																	
228	CAG	CCT	GGA	TCG	GGC	TCC	ATG	CCA	TCA	AGA	TCC	ACT	TCT	CAC	ACT	TCA	1758
229	Gln	Pro	Gly	Ser	Gly	Ser	Met	Pro	Ser	Arg	Ser	Thr	Ser	His	Thr	Ser	
230			-	520	•				525	-				530			
231																	
232	GAT	TTC	AAC	CCG	AAT	TCT	GGT	TCA	GAC	CAA	AGA	GTA	GTT	AAT	GGA	GGT	1806
233	Asp	Phe	Asn	Pro	Asn	Ser	Gly	Ser	Asp	Gln	Arg	Val	Val	Asn	Gly	Gly	
234	_		535				-	540	_		•		545		_	-	
235																	
236	GTT	CCC	TGG	CCA	TCG	CCT	TGC	CCA	TCT	CCT	TCC	TCT	CGC	CCA	CCT	TCT	1854
237	Val	Pro	Trp	Pro	Ser	Pro	Cys	Pro	Ser	Pro	Ser	Ser	Arg	Pro	Pro	Ser	
238		550					555					560		•			
239																	
240						CCC											1902
241	Arg	Tyr	Gln	Ser	Gly	Pro	Asn	Ser	Leu	Pro	Pro	Arg	Ala	Ala	Thr	Pro	
242	565					570					575					580	
243																	
244	ACA	CGG	CCG	CCC	TCC	AGG	CCC	CCC	TCG	CGG	CCA	TCC	AGA	CCC	CCG	TCT	1950
245	Thr	Arg	Pro	Pro	Ser	Arg	Pro	Pro	Ser	Arg	Pro	Ser	Arg	Pro	Pro	Ser	
246					585					590					595		
247																	
248						GGT											1998
249	His	Pro	Ser		His	Gly	Ser	Pro		Pro	Val	Ser	Thr	Met	Pro	Lys	
250				600					605					610			
251																	
252						GGG											2046
253	Arg	Met		Ser	Glu	Gly	Pro		Arg	Met	Ser	Pro	_	Ala	G1n	Arg	
254			615					620					625				
255								_									
256						AGA											2094
257	His		Arg	Asn	His	Arg		Ser	Ala	Gly	Arg	_	Ser	Ile	Ser	Ser	
258		630					635					640					

### SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/08/727,084B

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